



# **Focus Area Work Session**

## **Land Use and Institutional Controls and Homeland Security**

Weldon Spring Site  
Interpretive Center

December 5, 2002



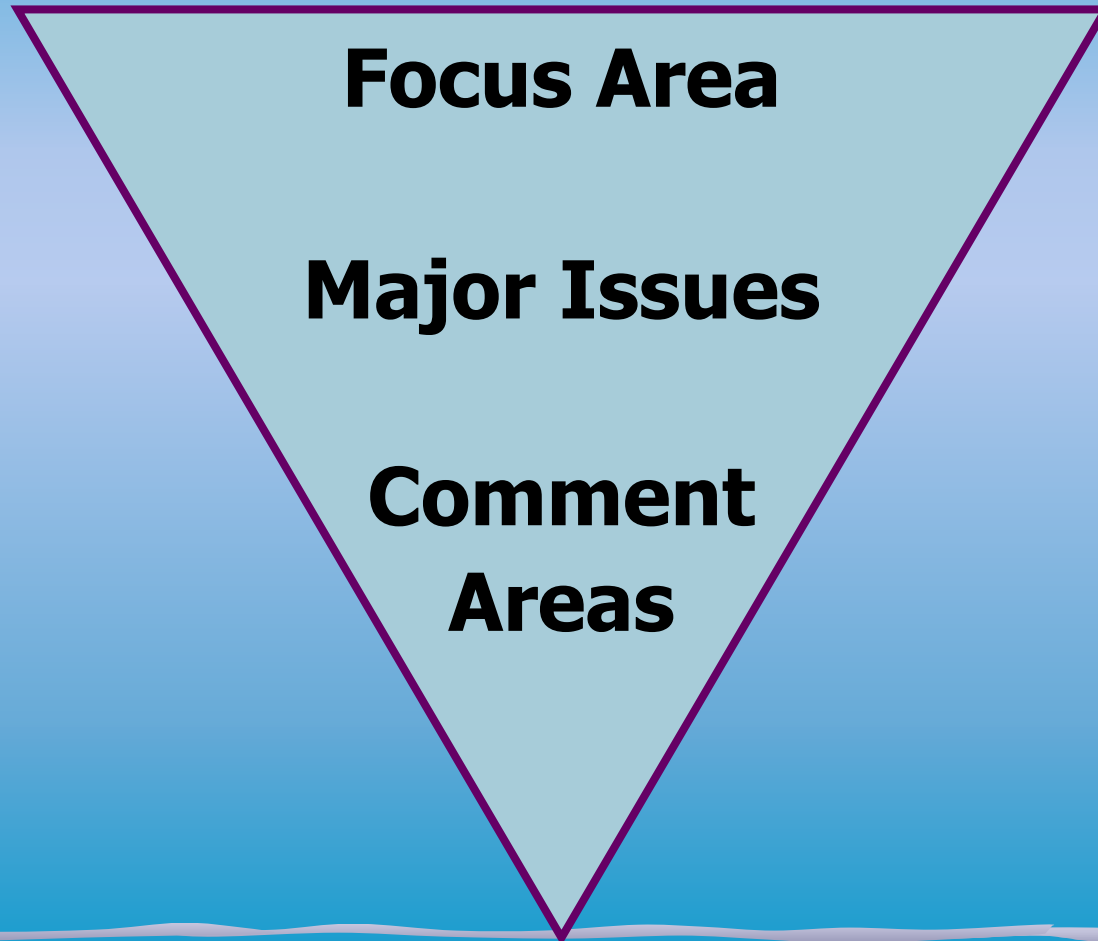
# Agenda

- 7:00 p.m. Welcome, Pam Thompson, Manager, Weldon Spring  
Objective of Work Session, Dave Geiser, Director,  
DOE Office of Long-Term Stewardship  
Results of the October 23, 2002, Work Session on  
Communication and Public Participation;  
Approach to Work Session,  
Ray Plienness, Deputy Manager, DOE Grand Junction Office
- 7:10 p.m. Major Issue 1: Assess Risks From Residual Contamination,  
Mary Picel, Argonne National Laboratory
- 7:30 p.m. Major Issue 2: Define Institutional Control Areas and  
Requirements and Institutional Control Process and  
Implementation, Pam Thompson

## **Agenda (continued)**

- 8:00 p.m. Major Issue 3: Stewardship Activities for Institutional Controls, Ray Plienness
- 8:20 p.m. Major Issue 4: Site Security, Dave Geiser
- 8:40 p.m. Update on Weldon Spring Project Remedial and Transition Activities, Ray Plienness
- 8:50 p.m. Closing Comments, Dave Geiser
- 9:00 p.m. Adjourn

# **Weldon Spring Site Stewardship Work Session Discussion Plan**



# Weldon Spring Site Stewardship Work Session Discussion Plan

- Focus Area
  - DOE proposes to have three Focus Area sessions
    - October 23: Communication and Public Participation
    - December 5: Land Use and Institutional Controls and Homeland Security
    - January 2003: Monitoring and Maintenance

# Weldon Spring Site Stewardship Work Session Discussion Plan

- Major Issues
  - Each Major Issue was developed as a means to capture most of the Focus Area comments and consolidate them into a few Major Issues to promote general understanding of concerns and to facilitate communication between DOE and the public on common themes

# **Weldon Spring Site Stewardship Work Session Discussion Plan**

- **Comment Areas**
  - Each Comment Area describes significant comments in more detail under a Major Issue, which should allow resolution of the majority of comments without discussing individual comments

# Major Issue 1: Assess Risks From Residual Contamination

Sections 2.4 and 2.5 of *Long-Term Stewardship Plan*

- Comments relating to this issue: A-58, 67, 69, 79, 82, 87, 89, 138, 184, 186, 195, 279; B-28, 48; E-13, 14; F-18; H-11; J-2, 5, 34, 40, 62, 63; K-11; L-11, 23, 51, 52, 63, 64, 89, and 174
- Comment Areas
  - What are the risks?
  - Is the public safe from the remaining contamination?



# Major Issue 2: Define the Institutional Control Areas and Requirements and the Institutional Control Process and Implementation

## Section 2.6 of *Long-Term Stewardship Plan*

- Comments relating to Define the Institutional Control Areas and Requirements: A-18, 41, 51, 57, 68, 73, 74, 75, 76, 83, 84, 85, 86, 187, 192, 197, 226, 229; B-14, 15, 24, 25; E-5; H-32, 33; J-13, 27, 38, 41; K-17; L-11, 22, 57, 62, 64, 73, 74, 78, 81, 142, and 165

# Major Issue 2 (continued)

- Comment Areas
  - Current State land use and controls, Missouri Department of Natural Resources
  - Current Federal land use and controls
  - Where will institutional controls be required?
  - How will current land use be affected?

## Major Issue 2 (continued)

- Comments relating to the Institutional Control Process and Implementation: A-5, 73, 80, 88, 116; B-6, 16, 28; D-1, 4; E-9; J-24, 25, 28, 29, 32, 33; K-6; L-61, 97, 98, 99, and 100
- Comment Areas
  - Process for developing institutional controls
  - Opportunities for stakeholder input

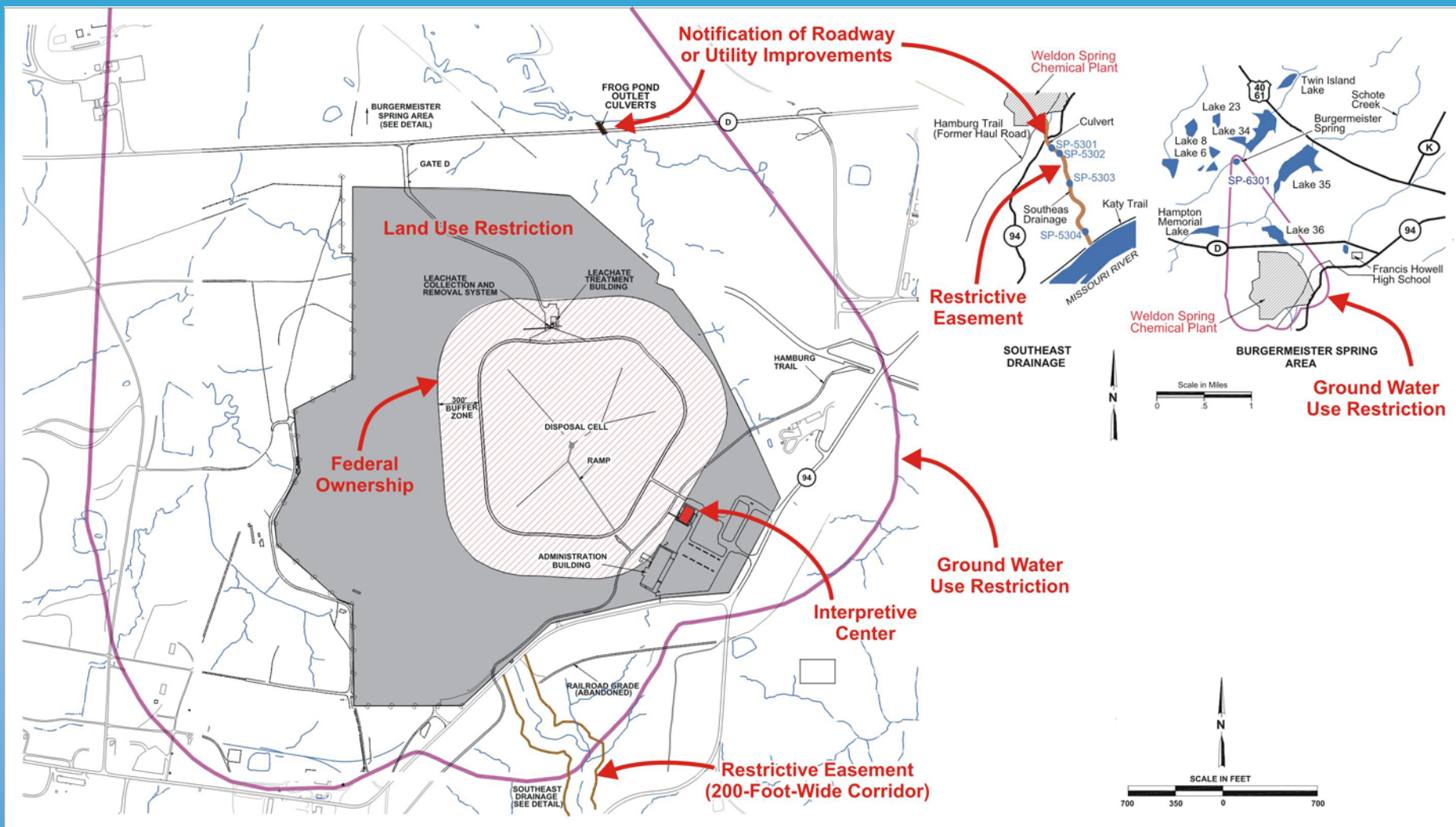
**This table is reproduced as it was presented in the August 9, 2002,  
draft *Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site***

Location	Type	Contaminants	Reference Document	Property Owner
Disposal Cell	Soil, building debris, stabilized sludge isolated in an engineered containment system	Uranium, thorium, radium, nitroaromatic compounds, metals, asbestos, PAHs, and PCBs	<i>Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site</i> (DOE 1993)	DOE
Culverts under County Route D at Frog Pond Outlet, 1.0 mile west of Highway 94 intersection	Bedding material under the culverts and fixed surface contamination on corrugated metal pipe	Uranium	"Applications for Supplemental Surface Contamination Limits for Southeast Drainage and Frog Pond Drainage Culverts" (DOE 2001b)	Missouri Department of Transportation, Missouri Department of Conservation, utilities with easements
Culvert under State Highway 94 at Southeast Drainage, 1.5 miles south of Route D intersection	Fixed surface contamination on corrugated metal pipe	Uranium	"Applications for Supplemental Surface Contamination Limits for Southeast Drainage and Frog Pond Drainage Culverts" (DOE 2001b)	Missouri Department of Transportation, Missouri Department of Conservation
Southeast Drainage between the Chemical Plant boundary and Katy Trail	Stream sediments and contaminated spring water	Uranium, thorium, and radium	<i>Southeast Drainage Closeout Report Vicinity Properties DA4 and MDC7</i> (DOE 1999b)	Missouri Department of Conservation
Chemical Plant ground water	Ground water in the Burlington-Keokuk Limestone	Uranium, TCE, nitroaromatics, and nitrate	GWOU Record of Decision (pending)	DOE, U.S. Army, Missouri Department of Conservation, Missouri Department of Transportation
Quarry proper	Soil in inaccessible locations	Uranium, thorium, and radium	<i>Remedial Design/Remedial Action Work Plan for the Quarry Residuals Operable Unit</i> (DOE 2000c)	DOE
Quarry area north of Femme Osage Slough (reduction zone)	Soil between the Katy Trail and the Femme Osage Slough	Uranium	<i>Completion Report for the Geochemical Characterization Performed in Support of the QROU Field Studies</i> (DOE 2002b)	Missouri Department of Conservation
Quarry ground water	Ground water in the alluvium, Kimmswick Limestone, Decorah Group, and Platin Limestone	Uranium and 2,4-DNT	<i>Remedial Design/Remedial Action Work Plan for the Quarry Residuals Operable Unit</i> (DOE 2000c)	DOE, Missouri Department of Conservation

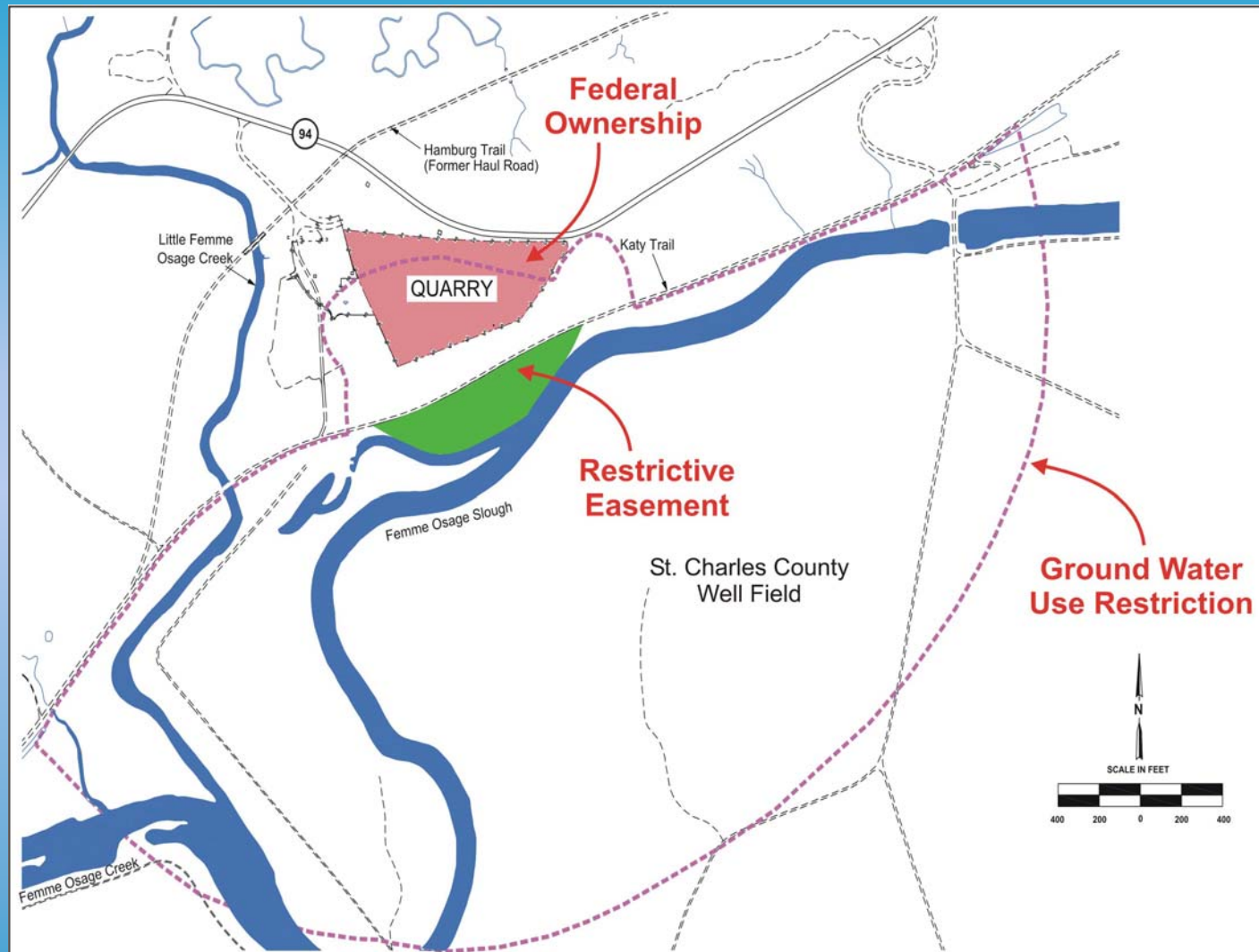
Key: DNT = dinitrotoluene; PAH = polycyclic aromatic hydrocarbons; PCB = polychlorinated biphenyl; TCE = trichloroethylene.

*Table 2-3. Areas Subject to Institutional Controls Associated with the Weldon Spring, Missouri, Site*

This figure was presented at the August 28, 2002,  
Long-Term Stewardship Plan Workshop



*Institutional Control Locations at the Chemical Plant Area*



*Institutional Control Locations at the Quarry Area*

# Major Issue 3: Stewardship Activities for Institutional Controls

Sections 2.8 and 3.7 of *Long-Term Stewardship Plan*

- Comments relating to this issue: A-156, 202, 204, 242, 249; B-17, 26, 28, 34, 35, 48, 51, 54; E-12, 16, J-3, 20, 26, 30, 56, 57; K-12, 21; L-107, 121, and 158
- Comment Areas
  - Maintaining public and agency awareness
  - Inspection and monitoring activities
  - Postings and access restrictions
  - Institutional control enforcement



**This table is reproduced as it was presented in the August 9, 2002, draft *Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site***

Institutional Control <sup>a</sup>	Method of Implementation <sup>b</sup>	Parties to Agreement	Duration
<b>Chemical Plant (see Figure B-1)</b>			
Restrict land use at disposal cell, 300-ft buffer area, and area between buffer area and site boundary	Control land use through Federal ownership	DOE	In perpetuity
Restrict land use in area between buffer area and site boundary to prohibit ground water use and changes to final grading	Restrictive use agreements with possible lessee	Lessee, DOE	In perpetuity, except that ground water use restrictions may be removed when ground water meets standards
Restrict nonrecreational use in Southeast Drainage	Restrictive easement	Missouri Department of Conservation, DOE	In perpetuity
Restrict exposure to contaminated ground water <sup>c</sup>	Restrictive easements	Missouri Department of Conservation, Department of the Army, possibly others, DOE	Until ground water meets standards and use restrictions are removed
Restrict consumption of water at Springs 6301, 5301, 5302, 5303, and 5304	Restrictive easements	Missouri Department of Conservation, DOE	Until ground water meets standards and use restrictions are removed
Restrict exposure to contaminated pipes or soil at culverts under State Highway 94 and County Route D	Notification of roadway or utility improvements	Missouri Department of Transportation, County Public Works Department, utility companies, DOE	Until culverts are replaced

<sup>a</sup>These institutional controls have not yet been implemented.

<sup>b</sup>These are typical methods; actual methods have not been identified.

<sup>c</sup>These institutional controls are tentative and will not be finalized until the Ground Water Operable Unit Record of Decision is approved.

**Table 2-12. Summary of Institutional Controls for the Weldon Spring, Missouri, Site**



**This table is reproduced as it was presented in the August 9, 2002, draft *Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site***

<b>Institutional Control<sup>a</sup></b>	<b>Method of Implementation<sup>b</sup></b>	<b>Parties to Agreement</b>	<b>Duration</b>
<b>Quarry (see Figure B-2)</b>			
Restrict non-recreational land use on quarry property	Control land use through Federal ownership	DOE	In perpetuity
Restrict ground water use in area of ground water contamination and in area south of Katy Trail	Restrictive easement	Missouri Department of Conservation, DOE	Until ground water meets standards
Restrict land use to prevent physical disturbance of reduction zone	Restrictive easement	Missouri Department of Conservation, DOE	In perpetuity

<sup>a</sup>These institutional controls have not yet been implemented.

<sup>b</sup>These are typical methods; actual methods have not been identified.

<sup>c</sup>These institutional controls are tentative and will not be finalized until the Ground Water Operable Unit Record of Decision is approved.

*Table 2-12 (Continued). Summary of Institutional Controls for the Weldon Spring, Missouri, Site*

# Major Issue 4. Site Security

## Section 3.9 of *Long-Term Stewardship Plan*

- Comments relating to this issue: A-4, 92, 206, B-7; D-6, and J-67
- Comment Areas
  - Flyover restrictions
  - Restricting access to disposal cell

# Response to Focus Area Session Input

- Input from Focus Area sessions will be recorded but specific responses will not be developed after each session. However, responses will be adopted and included either in the revised draft *Long-Term Stewardship Plan* or in a response summary that will identify why the comment is not being adopted. If a response summary is prepared, it will be distributed with the revised draft *Long-Term Stewardship Plan*.

# Timetable

September 10, 2002	Comments due on draft <i>Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site</i>
October 10, 2002	Responses to comments posted on Internet at <a href="http://www.gjo.doe.gov/programs/ltsm/maps/mo-i.htm">www.gjo.doe.gov/programs/ltsm/maps/mo-i.htm</a> and mailed to requesters
October 23, 2002	Focus Area Work Session: Communication and Public Participation
December 5, 2002	Focus Area Work Session: Land Use and Institutional Controls and Homeland Security
January 2003	Focus Area Work Session: Monitoring and Maintenance
January 2003	Weldon Spring LTSM Program website <ul style="list-style-type: none"><li>– On-line viewing of all site documents listed in the Weldon Spring <i>Long-Term Stewardship Plan</i> and key documents contained in the completed Administrative Records</li><li>– On-line viewing of historical water-quality and water-level data for existing wells</li></ul>
Spring 2003	Issue revised draft <i>Long-Term Stewardship Plan</i>
Spring 2003	Issue draft Proposed Plan for the Ground Water Operable Unit
Fiscal Year 2003	Add key Weldon Spring documents to the LTSM Program website

# Points of Contact

**Comments:** weldoncomments@gjo.doe.gov  
stewardship@wssrap.com

**Pam Thompson**, Program Manager  
U.S. Department of Energy Weldon Spring Site  
Phone: (636) 441-8978

**Art Kleinrath**, Program Manager  
Long-Term Surveillance and Maintenance Program  
U.S. Department of Energy Grand Junction Office  
Phone: (970) 248-6037

**Wendee Ryan**, Public Affairs Manager  
S.M. Stoller Corporation  
Phone: (970) 248-6765